

**Lane Construction  
Penobscot County  
Hermon, Maine  
A-860-71-B-A (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Lane Construction (Lane), located in Hermon, was issued air emission license A-860-71-A-N on June 9, 2003, permitting the operation of their hot mix asphalt plant and their crushed stone and gravel facility.

Lane has requested a minor modification to replace the existing venturi-wet scrubber on the asphalt plant with a baghouse.

**B. Revised Emission Equipment**

**Asphalt Plant:**

<b>Equipment</b>	<b>Process Rate (tons/hour)</b>	<b>Design Capacity</b>	<b>Max. Firing Rate/ Fuel Type</b>	<b>Control Device</b>
66 Rotary Dryer	200	103.5 MMBtu/hr,	740 gal/hr, #2 fuel & specification waste oil, 0.35% Sulfur	<b>Baghouse</b>
H1 Hot Oil Heater	-	1.5 MMBtu/hr	11 gal/hr, #2 fuel, 0.35% Sulfur, 16 gal/hr, natural gas	none

**Bold** depicts changed equipment.

**Associated Diesel Units:**

<b>Source ID</b>	<b>Max. Capacity</b>	<b>Max. Firing Rate</b>	<b>Fuel Type</b>
Generator 1	1.6 MMBtu/hr	11.4 gal/hr	#2 Fuel, 0.35% Sulfur
Generator 2*	0.45 MMBtu/hr	3.2 gal/hr	#2 Fuel, 0.35% Sulfur

\*Noted for inventory purposes only; < 0.5 MMBtu/hr heat input.

**C. Application Classification**

The application for Lane includes the replacement of pollution control equipment, therefore the license is considered to be a minor modification.

## **II. BEST PRACTICAL TREATMENT**

The replacement of an existing air pollution control system requires the new air pollution control system be able to achieve Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations.

### **A. Drum Mix Hot Asphalt Plant**

The drum mix asphalt plant was manufactured in 1980 and is therefore subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973.

The drum mix asphalt plant fires #2 fuel oil and specification waste oil, with a sulfur content not to exceed 0.35%. Fuel use shall not exceed 500,000 gal/year based on a 12 month rolling total.

To meet the requirements of BPT and NSPS for the control of particulate matter (PM) emissions from the drum mix asphalt plant shall vent to a baghouse. Opacity from the asphalt batch plant baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

Based on the above hot mix asphalt plant process rate, the average emission rate from the asphalt baghouse shall be limited to 0.03 grs/dscf (8.08 lb/hr).

The performance of the baghouse shall be constantly monitored by either one of the following at all times the drum mix asphalt plant is operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Lane shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

The asphalt plant is subject to the NSPS performance testing and reporting requirements in 40 CFR Part 60 Subparts A and I . These subparts contain requirements for the asphalt plant start up including Method 5 and Method 9 performance tests within 60 days of achieving the maximum production rate of this plant, but no later than 180 days after startup.

General process emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period.

Petroleum contaminated soil processing cannot exceed 10,000 cubic yards per year without prior approval from the Department. The facility shall only process soils contaminated with gasoline or #2 fuel without prior approval from the Department.

B. Revised Facility Emissions

- 500,000 gallons per year of #2 fuel oil or specification waste oil (0.35% sulfur by weight maximum) in the drum mix asphalt plant and Heater H1 (combined).
- 40,000 gallons per year of #2 fuel oil in Generator 1, 0.35% sulfur by weight maximum.  
(all based on a 12 month rolling total)

**Total Annual Emissions for the Facility**  
(used to calculate the annual license fee)

Pollutant	Asphalt Plant/Heater H1	Generator 1	Total Tons/year
PM	2.7	0.3	3.0
PM <sub>10</sub>	2.7	0.3	3.0
SO <sub>2</sub>	12.3	1.0	13.3
NO <sub>x</sub>	3.7	12.2	15.9
CO	8.8	2.6	11.4
VOC	2.2	1.0	3.2

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the above total facility emissions, Lane is below the emissions level required for modeling and monitoring.

**ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

will receive Best Practical Treatment,  
will not violate applicable emission standards,  
will not violate applicable ambient air quality standards in  
conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-860-71-B-A, subject to the conditions in license A-860-71-A-N in addition to the following conditions:

The following shall replace Condition 16(G) of Air Emission License A-860-71-A-N:

(16) **Asphalt Plant**

G. Lane shall be limited to the use of 500,000 gal/year of #2 fuel oil and specification waste oil (12 month rolling total), with a sulfur content not to exceed 0.35% by weight in the dryer or hot oil heater. Emissions from the baghouse shall not exceed the following [MEDEP Chapter 115, BPT]:

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	8.07
PM <sub>10</sub>	-	8.07
SO <sub>2</sub>	-	36.48
NO <sub>x</sub>	-	11.00
CO	-	26.00
VOC	-	6.40

The following shall replace Condition 18 of Air Emission License A-860-71-A-N:

(18) **Generator 1**

- A. Fuel use in Generator 1 shall not exceed 40,000 gal/year of #2 fuel, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.35% by weight. [MEDEP Chapter 115, BPT]
- B. A log documenting fuel use, including receipts showing the type and quantity of fuel delivered and its sulfur content, for the diesel generator shall be maintained on a monthly as well as on a twelve month rolling basis. The log shall be kept at the location of the asphalt plant. [MEDEP Chapter 115, BPT]
- C. Emissions from Generator 1 shall not exceed the following [MEDEP Chapter 115, BPT]:

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.19
PM <sub>10</sub>	0.19
SO <sub>2</sub>	0.56
NO <sub>x</sub>	7.06
CO	1.52
VOC	0.56

- D. Visible emissions from Generator 1 shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 2 six minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

**The following shall replace Condition 21 of Air Emission License A-860-71-A-N:**

- (21) Lane shall comply with NSPS performance testing and reporting requirements in 40 CFR Part 60 Subparts A, and I. This requires, in part, that Lane complete Method 5 and Method 9 performance tests within 60 days of achieving the maximum production rate of this asphalt plant with the new baghouse, but no later than 180 days after startup of the asphalt plant using the new baghouse. Lane shall submit a test notice to the regional inspector at least 30 days prior to the performance test.

Lane shall comply with the notification and record keeping requirements of 40 CFR Part 60.7. [40 CFR Part 60 Subparts A and I]

**The following are new conditions:**

- (25) **General Process Sources**

Visible emissions from any general process source shall (including conveyor belts) not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101 and Chapter 115, BPT]

- (26) Lane shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard [Title 38 MRSA §605-C].

DONE AND DATED IN AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-860-71-A-N.**

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 17, 2004

Date of application acceptance: February 20, 2004

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This order prepared by Mark E. Roberts, Bureau of Air Quality.